

REMARKS

Claims 2-4, 7-16, 28-29, and 31-35 are pending. Claims 7, 11, and 28 have been amended for clarity purposes. The specification has been amended to correct a minor typographical error. No new matter has been introduced by these amendments.

Claims 28-29, and 31¹ stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,291,811 to Ogawa. Applicants respectfully request reconsideration of this rejection.

Claim 28 recites an imaging device that includes, *inter alia*, “a rigid housing having a cavity defined by side walls and a closed bottom.“ A semiconductor imaging chip is “located within said cavity of said housing.“ The semiconductor imaging chip is “encapsulated in a transparent material...disposed within said cavity.“ The transparent material is “contained by said side walls and closed bottom of said housing.”

Owaga discloses an imaging device in which a chip 90 encapsulated by transparent resin 95a. The transparent resin 95a is covered with a photo-shield layer 95b. Photo-shield layer 95b is black insulating paint. See Ogawa FIG. 16 and col. 12, line 59 to col. 13, line 16. Owaga does not disclose and does not anticipate an imaging device with “a rigid housing.“ Consequently, Owaga does not disclose and does not anticipate a rigid housing having “a cavity defined by side walls and a closed bottom.“

¹ The Office Action also included claim 32 in this rejection. Claim 32 depends, however, from claim 7. Applicants have presumed in this response that claim 32 was intended to be grouped with claim 7 and have addressed claim 32 below.

Applicants respectfully submit that claim 28 is patentable over Owaga. Claims 29 and 31 depend directly from claim 28 and are patentable over Owaga for at least the same reasons set forth above for claim 28.

Claims 2-4, 7-10, 32 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of U.S. Pat. No. 5,378,916 to Mantell. Applicants respectfully request reconsideration of this rejection.

Claim 7 recites an imaging device that includes, *inter alia*, “a package comprising a transparent material encapsulating said frame, support structure, and semiconductor imaging chip, said transparent material covering said chip,” and “photosensitive elements receiving said image through said transparent material.” Portions of the transparent material “through which light passes to said photosensitive elements have respective color tints to provide colored light filtering.”

Owaga does not disclose “an imaging device” with a “a package comprising a transparent material encapsulating said frame, support structure, and semiconductor imaging chip,” and the transparent material “is tinted to provide colored light filtering.” Recognizing this deficiency, the Office Action cites to Mantell as providing “the possibility of combining color filters with the photosensitive regions.” The color filters disclosed by Mantell, however, are not a “transparent material encapsulating [a] frame, support structure, and semiconductor imaging chip,” and portions of the transparent material “have respective color tints to provide colored light filtering.” Instead, separate color filters are added to “fine tune” the Mantell device response.

Accordingly, claim 7 is not disclosed, anticipated, or rendered obvious by Ogawa in view of Mantell. Claims 2-4, 8-10, 32, and 34 depend directly or indirectly

from claim 7 and are patentable over Ogawa in view of Mantell for at least the same reasons as set forth above for claim 7.

Claims 11-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of U.S. Pat. No. 4,663,656 to Elabd et al. Applicants respectfully request reconsideration of this rejection.

Claim 11 recites an imaging system that includes, *inter alia*, “a transmitting system for transmitting an image including an image source, said transmitting system being arranged to transmit the entire image simultaneously onto each of a plurality of imaging devices.” Each imaging device includes a “frame, support structure, and respective semiconductor device...encapsulated in transparent material of a respective package for protecting and supporting each said semiconductor device.” The “transparent material of at least one of [the] packages [has] a color different from remaining...packages.”

Deficiencies of Ogawa are admitted in the Office Action. The deficiencies include lack of a transmitting system for an image source and the arrangement of the system for transmitting an image. Elabd et al. is cited as providing an imaging system for transmitting an image source. Elabd et al. does not teach or suggest features missing from Ogawa of, for example, an imaging device that includes a “frame, support structure, and respective semiconductor device...encapsulated in transparent material of a respective package for protecting and supporting each said semiconductor device,” where the “transparent material of at least one of [the] packages [has] a color different from remaining...packages.”

Accordingly, Applicants respectfully submit that claim 11 is patentable over Ogawa in view of Elabd et al. Claims 12-16 depend directly or indirectly from claim 11

and are patentable over the proposed combination of Ogawa in view of Elabd et al. for at least the same reasons as set forth above for claim 11.

Claims 33 and 35² stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of U.S. Pat. No. 5,644,169 to Chun. Applicants respectfully request reconsideration of this rejection.

Claims 33 and 35 depend from claim 28. Claim 28 is patentable over Ogawa as advanced above. Chun does not remedy the deficiencies of Ogawa. Chun has been cited merely as suggesting a ceramic housing and a planar upper surface. Chun does not disclose or modify Ogawa to obtain “an imaging device” with “a rigid housing” and a “semiconductor chip... encapsulated in a transparent material contained by said housing.”

In addition, the proposed combination of Ogawa and Chun fails to establish *prima facie* obviousness as there is no motivation to combine the references in the manner suggested by the Office Action. Claim 28 recites “a rigid housing” that contains a “semiconductor chip... encapsulated in a transparent material.” Chun discloses a glass lid provided over the top of the cavity containing light-receiving region 11a. Ogawa discloses packages without a rigid housing and without cavities. Chun teaches directly away from Ogawa and a transparent material “encapsulating said... semiconductor imaging chip.”

Accordingly, Applicants respectfully submit that claim 28 is patentable over the proposed combination of Ogawa and Chun. Claims 33 and 35 depend directly from

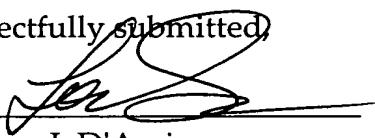
² Claim 35 is not listed in the first sentence of section 6 on page 8 of the Office Action but is discussed in a subsequent paragraph on page 9.

claim 28 and are patentable over Ogawa in view of Chun for at least the same reasons as set forth above for claim 28.

In view of the above amendment and remarks, applicants believe the pending application is in condition for allowance.

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